Message

From: Rapicavoli, Emmanuelle [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=FF3604A98B624BB7A1A9A236EC176998-ERAPICAV]

Sent: 3/28/2017 4:01:46 PM

To: Carter, James (IHS/PHX) [James.Carter2@ihs.gov]

Subject: RE: HAMP Critical Path Call on Tuesday

I don't see a call in #

Weren't you going to call me? Should I call Eric's office?

Emmanuelle Rapicavoli Drinking Water Protection Section (WTR 3-2) Environmental Protection Agency, Region 9 75 Hawthorne Street San Francisco, Ca 94105 (415) 972-3969 (phone) (415) 947-3545 (fax)

<u>Please</u>: All data submittals to our office should be sent by email to <u>datamanager@epa.gov</u> with a copy to me (or your project manager in the Drinking Water Office). Data reports are due no later than the **10**th of the month following the month that you receive results, or the **10**th of the month following the compliance period, whichever comes first. Please include the whole lab report and copy of the Chain of Custody. Label with PWS name and number; & source or distribution system location codes or names for data collection points.

From: Carter, James (IHS/PHX) [mailto:James.Carter2@ihs.gov]

Sent: Tuesday, March 28, 2017 8:35 AM

To: Rapicavoli, Emmanuelle <Rapicavoli.Emmanuelle@epa.gov>

Subject: FW: HAMP Critical Path Call on Tuesday

Emmanuelle,

Here is the call in number for the meeting at 9:00 today. Looks like you may have not of received it.

James

From: Tim Bodell [mailto:TBodell@hopi.nsn.us]

Sent: Friday, March 24, 2017 4:09 PM

To: Matson, Eric (IHS/PHX) < Eric. Matson@ihs.gov>; Lionel Puhuyesva < LPuhuyesva@hopi.nsn.us>

Cc: Carter, James (IHS/PHX) < <u>James.Carter2@ihs.gov</u>> **Subject:** RE: HAMP Critical Path Call on Tuesday

Affirmative Eric,

HPUA requests IHS to complete the listed aerial mapping, groundwater characterization and arsenic mitigation alternatives analysis Tasks 1.0 through 6.0 funded through USEPA IA program required for a more comprehensive HAMP PER submittal. Alternatively IHS and USEPA may sustain Hopi to engage independent consultants or subcontractors to expedite the remaining tasks.

I will be prepared to brief the team on the rational of the remaining scope of work activities.

IHS may provide guidance on the proposed scope of work and additional Turquoise Trail Well 2 & 3 drawdown duration and arsenic testing information omitted from the HAMP PER appendices.

Additionally, current project constraints imposed by IHS perception of "building a bridge to nowhere" need to be fully understood by Hopi and USEPA or eliminated.

Gratefully,

TIM 928 401 4000.

rom: Matson, Eric (IHS/PHX) [Eric.Matson@ihs.gov]

Sent: Friday, March 24, 2017 10:18 AM **To:** Tim Bodell; Lionel Puhuyesva **Cc:** Carter, James (IHS/PHX)

Subject: HAMP Critical Path Call on Tuesday

Hi Tim and Lionel,

Thanks for the call yesterday.

Looks like you have multiple parties lined up for a team call on Tuesday. It might be helpful if you could provide your final list of attendees with an agenda for the call to keep us on task. Your below list of topics/agenda served us well during yesterday's call so I'm assuming this is in part what you envision discussing on Tuesday as a group? The conference line and passcode for sharing with your invitees are 877-416-6418; 2378777. The conference line is reserved from 9:00-12:00 on Tuesday as I suspect this could go substantially longer than 30 minutes.

HPUA recommends the following investigation scope of work to determine the most feasible Best Management Practices to mitigate arsenic MCL concentrations in Hopi groundwater sources:

1.0 Prepare Base Map April

Capture and analyze rectified ortho-imagery and LiDAR topographic DEM at 0.3 Meter resolution throughout First, Second, Third Mesa, Turquoise Trail Well Field Study Area, plus alternative pipeline corridors. (This interactive mapping product possesses collateral value to Hopi natural resources, village water system design, wastewater, solid waste, transportation, economic development etc.)

2.0 GIS Analysis April

Acquire necessary hardware, software and training to perform geospatial inventory, analysis, asset management, water quality data and 3d Modeling of existing well field and alternative water system designs.

3.0 Perform aquifer drawdown arsenic trend tests. May

Time scaled drawdown vs. arsenic testing will be performed to measure source and contaminant pathways of existing wells. Submit report recommending existing well abandonment, future well location and well construction grout seal Best Management Practices.

4.0 Perform Bench Scale Arsenic Treatment Process June

Advanced treatment processes including membrane filtration, bead media absorption, and other appropriate technologies will be applied with actual Hopi groundwater at the bench scale to determine the most feasible and Best Available Control Technology for characteristic high pH in Hopi Southern Mesa Groundwater.

5.0 Revise Preliminary Engineering Report July

6.0 HPUA Program Management March through July

HPUA proposes to manage this program with D.B. Stevens as principle engineering advisor. Detailed scope of work and competitive costs are requested from pre-qualified research, investigation, laboratory and LiDAR surveying subcontractors.

7.0 Implementation of Interim Arsenic Compliance Measures. June - July

Eric L. Matson, P.E.

CAPT, USPHS

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